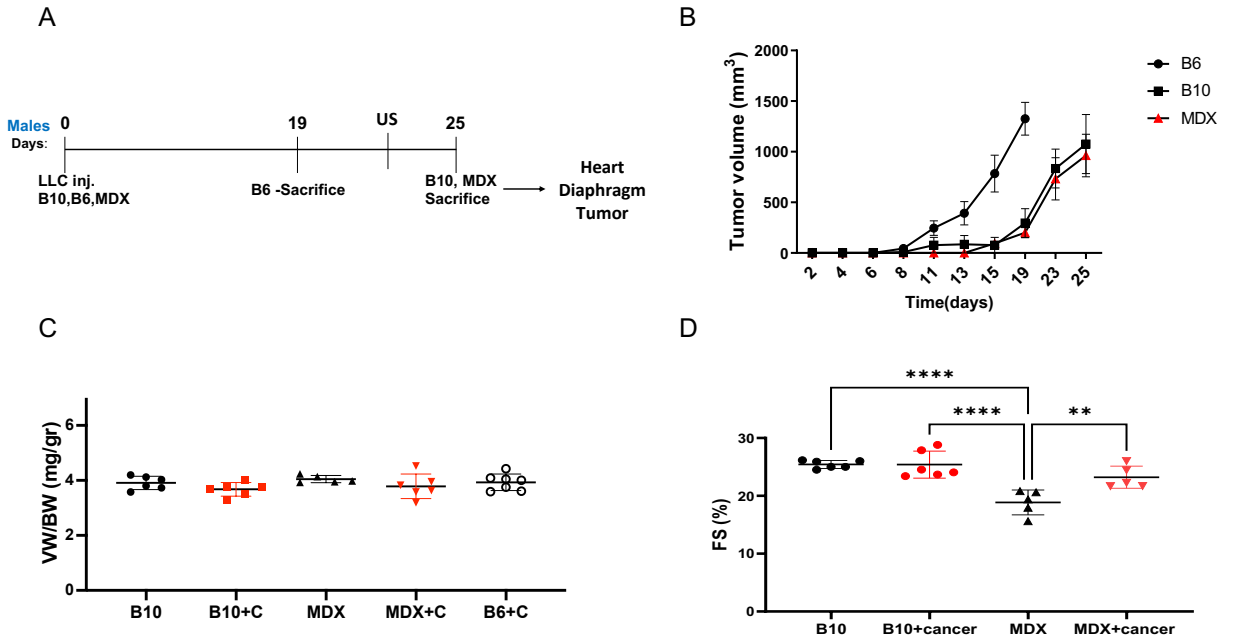
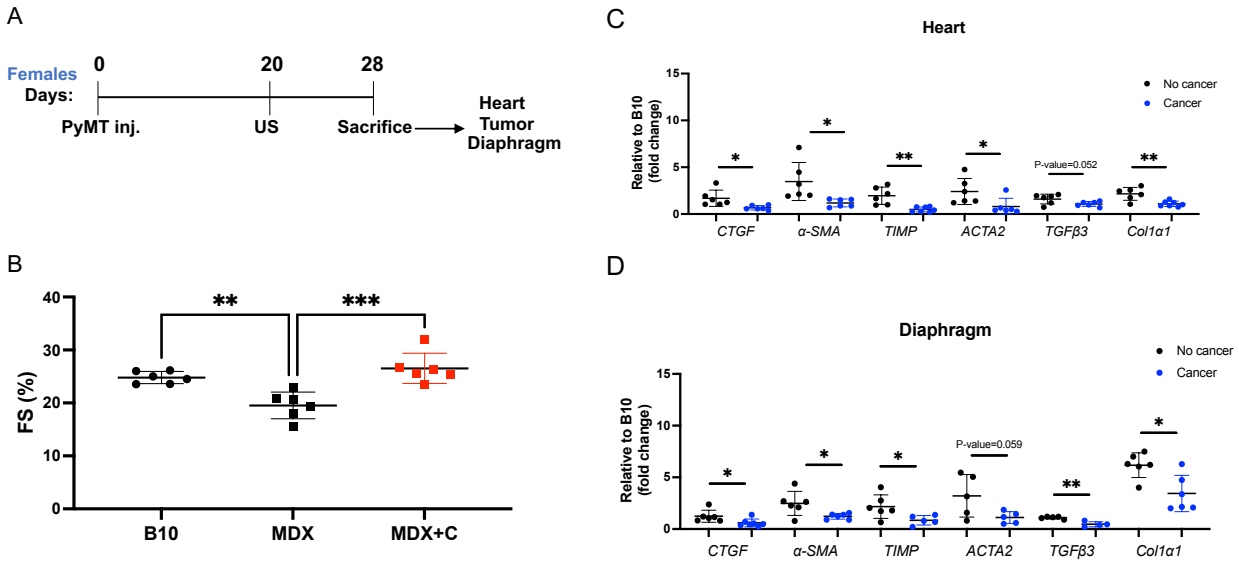
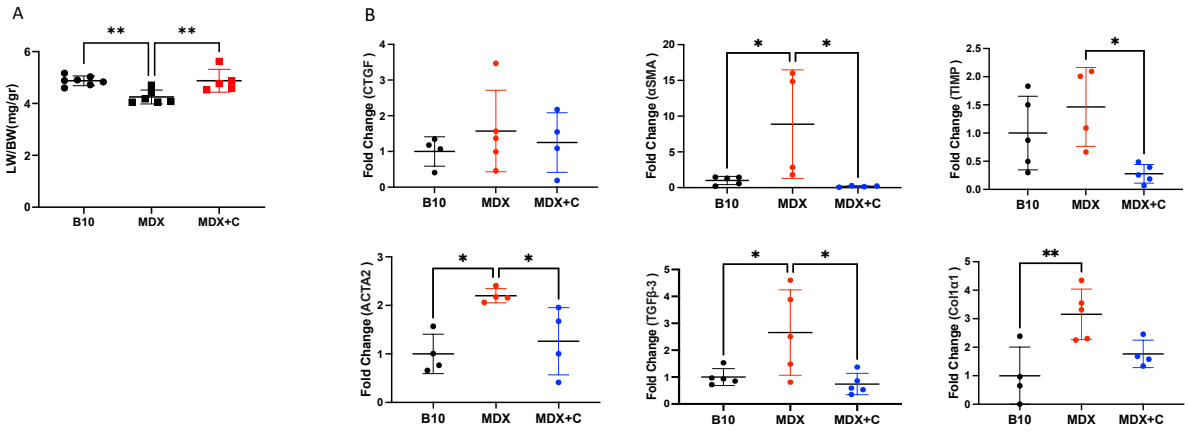
Supplemental Figures:



Sup Figure 1. ***LLC cancer cells implantation improves cardiac contractile function in MDX male mice.*** **A.** Schematic experimental timeline for C57Bl/10, C57Bl/6 or MDX male mice**.** Mice were injected into the flanks with Lewis Lung carcinoma (LLC) cancer cells ($0.5X10^6$ cells per mouse) or left untreated. Echocardiography was performed prior to sacrifice **B.** Tumor volume was monitored over time with the following formula: $Width^2XLengthX0.5$. **C**. Ventricular weight (VW) to body weight (BW) ratio at the endpoint. Each dot represents one mouse. **D**. One day before the endpoint, mice were examined by echocardiography. Fractional shortening (FS) was assessed according to: FS (%) = [(LVDd-LVDs)/LVDd]. Data represented as mean ±SE. One Way ANOVA followed by Turkey's multiple comparisons. **P<0.01. ****P<0.0001.



Sup Figure 2. PyMT tumor growth improves cardiac function and suppresses fibrosis hallmark gene markers transcription in the heart and diaphragm muscles in MDX mice. **(A).** Schematic experimental timeline for PyMT breast cancer cell model with female mice. MDX female mice were left untreated or subcutaneously injected into mammary fat pad (10^6 cells) or left untreated**.** C57Bl/10 is used as a control. Echocardiography was performed prior to sacrifice **(B)**. Fractional shortening (FS) was assessed according to: FS (%) = [(LVDd-LVDs)/LVDd]. (C-D) The transcription level of fibrosis hallmark gene markers of CTGF, αSMA, TIMP, ACTA2, TGFβ3 and Col1α1 were measured in the heart **(C)** and in the diaphragm muscles **(D)** using qRT-PCR. Results were normalized by housekeeping genes: Hsp90 in the heart and mb2M in the diaphragm. Results are presented as mean ± SEM, one-way ANOVA followed by Tukey post-test. * P< 0.05, **P<0.01. Each dot represents one mouse.



Sup Figure 3. Tumor growth suppresses fibrosis hallmark gene markers transcription in lungs of MDX male mice. **(A)** Lung's weight (LW) to body weight (BW) ratio at the endpoint. **(B)**. The transcription of fibrosis hallmark gene markers CTGF, αSMA, TIMP, ACTA2, TGFβ3 and Col1α1 were measured in the lungs derived from C57Bl/10, MDX or tumor-bearing MDX mice using qRT-PCR normalized with Hsp90. Data are presented as relative expression compared to C57/Bl/10 naïve mice determined as 1. Results are presented as mean ± SE, one-way repeated measures ANOVA followed by Tukey posttests. *, $P < 0.05$; **, $P < 0.01$. Each dot represents one mouse.

Supplemental Table 1 Sequences of oligonucleotides used for qRT-PCR.

Gene	Forward	Reversed
Hsp90	TCGTCAGAGCTGATGATGAAGT	GCGTTTAACCCATCCAACTGAAT
mb2M	TTCTGGTGCTTGTCTCACTGA	CAGTATGTTCGGCTTCCCATTC
βactin	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT
ACTA2	GTCCCAGACATCAGGGAGTAA	TCGGATACTTCAGCGTCAGGA
Col1α1	CTGGCGGTTCAGGTCCAAT	TTCCAGGCAATCCACGAGC
TGFβ3	CCTGGCCCTGCTGAACTTG	GACGTGGGTCATCACCGAT
CTGF	AGACCTGTGGGATGGGCAT	GCTTGGCGATTTTAGGTGTCC
TIMP	GCAACTCGGACCTGGTCATAA	CGGCCCGTGATGAGAAACT
α-SMA	GTCCCAGACATCAGGGAGTAA	TCGGATACTTCAGCGTCAGGA
F4/80	CCCCAGTGTCCTTACAGAGTG	GTGCCCAGAGTGGATGTCT
iNOS	GACATTACGACCCCTCCCAC	GCACATGCAAGGAAGGGAAC

CD206	CTAACTGGGGTGCTGACGAG	GGCAGTTGAGGAGGTTCAGT
Arg1	AATGAAGAGCTGGCTGGTGT	CTGGTTGTCAGGGGAGTGTT
CD163	CCTCCTCATTGTCTTCCTCCTGTG	CATCCGCCTTTGAATCCATCTCTTG
INFγ	ACAGCAAGGCGAAAAAGGATG	TGGTGGACCACTCGGATGA
TNF-α	CCCTCACACTCAGATCATCTTCT	GCTACGACGTGGGCTACAG
CCL2	GTGATGGAGGGGGTCAGGA	GGGATGGGACAGCCTAAACT
IL-13	AACGGCAGCATGGTATGGAGTG	TGGGTCCTGTAGATGGCATTGC

Oligonucleotide sequences used for qRT-PCR of the indicated genes.